STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL PROGRAM
1101 RIVERSIDE DRIVE, P.O. BOX 176
JEFFERSON CITY, MISSOURI 65102-0176

EMISSIONS INVENTORY QUESTIONNAIRE (EIQ)

FORM 2.5 ORGANIC LIQUID STORAGE - FIXED ROOF TANK

FACILITY NAME	FIPS COUNTY NO.	PLANT NO.	YEAR OF DATA

Please provide all the following information if this form is being used to derive emission factors for a liquid storage tank with capacities greater than 250 gallons. Please include all organic liquids, petroleum products or fuels.

[1] TANK INFORMATION

POINT NO.	TANK ID. NO.	SOURCE CLASSIFICATION CODE (SCC)		SEG. NO.
		BREATHING		
		WORKING		

COLOR (ROOF)	COLOR (SHELL)	PAINT CONDITION	SOLAR ABSORPTANCE
		☐ POOR ☐ GOOD	

DIAMETER (FT)	HEIGHT (FT)	LENGTH (FT)	TANK TYPE	ROOF TYPE
			☐ HORIZONTAL ☐ VERTICAL	☐ CONE ☐ DOME ☐ OTHER (SPECIFY):

CAPACITY (IN THOUSANDS OF GALLONS)	ROOF HEIGHT (FT)	VAPOR SPACE OUTAGE (FT)	VENT PRESSURE SETTING	VENT VACUUM SETTING	TOTAL SOLAR INSULATION FACTOR (BTU/SQ FT)

[2] CHEMICAL INFORMATION

CAS NUMBER	CHEMICAL	WORKING LOSS PRODUCT FACTOR
		☐ CRUDE OIL (VALUE = .75) ☐ ALL OTHER LIQUIDS (VALUE = 1.0)

VAPOR MOLECULAR WT	LBT (RANKINE)	D-MIN-AT (RANKINE)

LST - [AVERAGE LIQUID SURFACE TEMPERATURE (RANKINE)]	DVTR (RANKINE)	D-MAX-AT (RANKINE)
AVG: MAX: MIN:		

VP - [VAPOR PRESSURE AT LST (PSIA)]	DVPR (PSI)	D-AVG-AT (RANKINE)

THROUGHPUT (IN THOUSANDS OF GALLONS)	NUMBER OF TURNOVERS	TURNOVER FACTOR

[3] VOC EMISSION CALCULATIONS

CALCULATION	FORMULA	RESULT
BREATHING LOSS (LBS/YR)	26.714 X {DIAMETER)^2 X {VAPOR SPACE OUTAGE} X {VAPOR MOLECULAR WEIGHT} X {VP} X [({DVTR} / {LST}) + [({DVPR} - ({VENT PRESSURE SETTING} - {VENT VACUUM SETTING})) / (14.7 - {VP})]] / [{LST} X [1 + (0.053 X {VP} X {VAPOR SPACE OUTAGE})]]	
WORKING LOSS (LBS/YR)	0.0238 X {VAPOR MOLECULAR WT} X {VP} X {THROUGHPUT} X {TURNOVER FACTOR} X {WORKING LOSS PRODUCT FACTOR}	
BREATHING LOSS EMISSION FACTOR (LBS VOC PER THOUSAND GALLONS CAPACITY)	{BREATHING LOSS} / {CAPACITY}	
WORKING LOSS EMISSION FACTOR (LBS VOC PER THOUSAND GALLONS STORED)	{WORKING LOSS} / {THROUGHPUT}	

Enter the capacity (breathing loss) and throughput (working loss) as the annual throughput in Section 2, Block 1 on separate Forms 2.0 making sure the SCC matches the breathing loss and working loss. Also enter the calculated breathing loss emission factor and working loss emission factor in the VOC box in Section 3, Block 7 of the respective Form 2.0.